In the Specification

page 8 after line 2 insert --Figure 8C is a block diagram of an apparatus for generating a moving haven boundary.

page 8 after line 4 insert –Figure 10 is a block diagram of an apparatus that may be utilized for the buffer generator of Figure 8C.

page 11 line 6

delete "67d" and insert therefor --67c--

delete "69c" and insert therefor --69d--

page 11 line 7

delete "are" and insert therefor --may be--

page 11 line 7

replace "," with a --.--

page 11 line 7 replace "as" with --As–

page 11 line 8 delete "are" and insert therefore --may be--

page 11 line 11

delete "must" and insert therefor --should--

page 11 line 18 delete "of"

page 11 line 18 delete "for" and insert therefore --about a vertex of--

page 12 line 15 delete "." after "step"

page 12 line 18 add "78" after --moving haven--

page 12 line 26 delete "81e"

page 14 line 11 after "point" delete "that"

page 14 line 14 delete "Figure A" and insert therefore --Figure 8A--

page 14 line 20 delete "Figure 8B" and insert therefore --Figure 8A--

page 15 at the top of the page insert

--An apparatus for creating a moving haven boundary as described above is illustrated in Figure 8C. The line segments and waypoints of the voyage plan are coupled to a polygonal line generator 90, wherein the line segments of the voyage plan (vectors between waypoints) are assembled and processed as described

above, with reference to Figure 8A, to provide a polygonal line representative of the voyage plan. These voyage plan line segments are coupled to a rectangle generator 92 wherein line segments (vectors) that form the rectangles about respective line segments of the polygonal line are determined. The rectangle line segments are utilized in arc generator 94 wherein arc line segments are established to approximate required arcs about a waypoint of the voyage plan polygonal line. Rectangle line segments and arc line segments are coupled to a segment combiner 96 of a boundary generator 98. Segment combiner 96 combines the rectangle line segments and arc line segments to establish a set of line segments which are coupled to start line selector 102. A start line segment is selected by the start line selector 102 which is coupled to an intersect segment selector 104 wherein a second line segment is selected that intersects the start line segment in accordance with the selection procedure previously described. The second line segment is coupled to a repeat generator 106 which designates it as a start line and causes the intersect selector 104 to select a third line from the set of line segments that intersects the second line segment in accordance with the selection criteria. The process is continued until all line segments in the set of line segments have been used. The moving haven boundary is then completed and a buffer generator 105 is activated to establish a buffer between the moving haven and the moving haven boundary.

Still referring to Figure 8C; the start line selector 102 may comprise a segment selector 108 wherein line segments in the segment combiner 96 that are entirely on or have a beginning on the moving haven boundary are selected. These selected line segments are coupled to a segment locator 110 wherein those line segments having start points at a position that is predetermined are identified and coupled to a direction determinator 112. Should more than one line segment originate at the predetermined position, the direction determinator 112 selects the one that points mostly in a predetermined direction, this direction may be "up", as previously mentioned.--

page 15 lines 8 and 9 place "moving haven boundary ..." on line 9 after "of the" on line 8

page 15 line 26 delete "The addition of" and insert therefore --By adding--

page 15 line 27 delete "and"

page 16 line 1 after "arc will" insert --be--

page 16 line 15 after "performed" insert --by buffer generator 80 (Figure 3)--

page 16 after line 27 insert

--Refer now to Figure 10, wherein a block diagram of a buffer polygonal line generator that may be utilized for the buffer generator 80 of Figure 8C is shown. The boundary polygonal line is coupled to a buffer rectangle generator 114 wherein rectangles which may be used for generating the buffer polygonal line are generated. These rectangles have widths that are twice the desired buffer width, lengths that are equal to the distance between vertices of the boundary rectangles or between a vertex and the beginning of a boundary arc, and are centered on the boundary polygonal line. Rectangles generated by the rectangle generator are coupled to a buffer arc generator 119, wherein the rectangles are coupled to a first vector generator 116 and a second vector generator 118. The first vector generator establishes a vector between a vertex of an end edge of a buffer rectangle and the point at which the end edge intersects the moving haven boundary. The second vector generator establishes a vector between the end point of the leading edge of the next adjacent buffer rectangle and the point at which that leading edge intersects the moving haven boundary. These vectors are of equal length and their points of intersection coincide as shown at point 48 in Figure 2A. Vectors so established are coupled to an angle determinator 120 wherein the angle between the first and second vectors are determined. Once the angle between the first and second vectors is determined, the first vector and the angle between the first and second vectors are coupled to a vector rotator 122 wherein the first vector is rotated through selected angular increments until the entire angle between the first and second vectors has been traversed. The vectors resulting from the rotations and the first

and second vectors are coupled to an end point locator 124 wherein the vector end points are determined. These end points are then coupled to a buffer polygonal line generator wherein they are connected to approximate an arc which is incorporated into the buffer polygonal line.--